## CLAIMS

 An organopolysiloxane hair treatment agent (A) represented by the following formula (1),

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$$R^{1}_{a}R^{2}_{b}R^{3}_{c}SiO_{(4-a-b-c)/2}$$
 (1)

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wherein R<sup>1</sup> is an organic group selected from the group consisting of alkyl groups having 1 to 30 carbon atoms, alicyclic groups, aryl groups, aralkyl groups, fluorinated alkyl groups and an organic group represented by following formula (2),

$$-C_dH_{2d}-O-(C_2H_4O)_e(C_3H_6O)_fR^4$$
 (2)

wherein  $R^4$  is an alkyl group having 1 to 30 carbon atoms, provided that, when d=e=f=0, said alkyl group has 7 to 30 carbon atoms, or an organic group represented by the formula,  $R^5$ -(CO)-, wherein  $R^5$  is an alkyl group having 1 to 30 carbon atoms,

R<sup>2</sup> is a group having at least one hydroxyl group or alkoxy group having 1 to 6 carbon atoms, which group may be bonded to a silicon atom in the formula (1) via a group having a carbon atom, a silicon atom, or a carbon and a silicon atoms,

 $R^3$  is a silicone compound residue represented by the following formula (3),

$$R^{\circ}$$
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 $-C_xH_{2x}-(SiO)_y-SiR^{6}_{3}$  (3)

 $|$ 
 $R^{6}$ 

wherein R<sup>6</sup> is a group selected from the group consisting of alkyl groups having 1 to 30 carbon atoms, alicyclic groups, aryl groups, aralkyl groups, and fluorinated alkyl groups, if two or more of the group R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup> or R<sup>6</sup>, respectively,

are present in a molecule, such group may be the same with or different from each other,

- a,b and c each is a number with 1.0  $\leq$  a  $\leq$ 2.5, 0.001 $\leq$  b  $\leq$ 1.5, and 0.001  $\leq$  c  $\leq$ 1.5,
- d, e and f each is an integer with  $0 \le d \le 15$ ,  $0 \le e \le 50$ , and  $0 \le f \le 50$ , x is an integer with  $1 \le x \le 5$ , and y is an integer with  $0 \le y \le 500$ .
- 2. The hair treatment agent according to claim 1, wherein the 10 hair treatment agent has a weight average molecular weight of from 300 to 100,000.
  - 3. The hair treatment agent according to claim 1 or 2, wherein  $R^1$  is an alkyl group having 1 to 6 carbon atoms, a fluorinated alkyl group having 1 to 6 carbon atoms, or a group represented by the formula,  $-C_3H_6O-1-(C_3H_6O)_fR^4$ , wherein  $R^4$  is an alkyl group having 7 to 30 carbon atoms and f is an integer with  $0 \le f \le 50$ ,  $R^2$  is an organic group represented by the following formula (4),

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wherein R<sup>7</sup> is a group selected from the group consisting of alkyl groups having 1 to 30 carbon atoms, alicyclic groups, aryl groups, aralkyl groups and fluorinated alkyl groups, R<sup>8</sup> is a hydroxyl group or an alkoxy group having 1 to 6 carbon atoms, z is an integer of from 1 to 5, and p is an integer of from 1 to 3,

in the formula (3),  $R^6$  is an alkyl group having 1 to 6 carbon atoms, x is 2, and y is an integer of from 1 to 15,

a,b and c each is a number with  $1.2 \le a \le 2.3$ ,  $0.05 \le b \le 1.0$ , and

 $0.05 \le C \le 1.0$ .

4. A hair cosmetic comprising the hair treatment agent according to any one of claims 1 to 3.

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- 5. A two-agent hair cosmetic kit composed of a first agent comprising at least one selected from the group consisting of amino-modified silicones, amino acid-modified silicones, and carboxyl-modified silicones, and a second agent comprising the hair treatment agent according to any one of claims 1 to 3.
- 6. A three-agent hair cosmetic kit composed of the two agents hair cosmetic kit according to claim 5 and an amino-modified silicone.

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7. The cosmetic according to claim 5 or 6, wherein the amino-modified silicone is at least one selected from the group consisting of silicones having an amino group grafted to a silicone backbone, silicones having an amino group bonded to either one end of a silicone backbone, silicones having amino groups bonded to both ends of a silicone backbone, silicones having amino groups bonded to both ends of a silicone backbone and an amino group grafted to the silicone backbone, and silicones having a silicone chain and an amino group both grafted to a silicone backbone.

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8. The cosmetic according to claim 7, wherein the amino-modified silicone is represented by the following formula (6),

wherein A is  $-R^{10}NH_2$  or  $-R^{10}NHR^{11}NH_2$ , wherein  $R^{10}$  and  $R^{11}$  are alkylene groups having 1 to 8 carbon atoms,

R<sup>9</sup> may be the same with or different from each other and is selected from the group consisting of alkyl groups having 1 to 30 carbon atoms, alicyclic groups, aryl groups, aralkyl groups, and fluorinated alkyl groups,

m and n may be the same with and different from each other and are integers of from 0 to 300, and s and t may be the same with or different from each other and are integers of from 0 to 3 with  $1 \le n+s+t$ .

- 9. The hair cosmetic according to any one of claims 4 to 8, wherein the hair cosmetic further comprises one or more of an unctuous agent (B).
- 10. The hair cosmetic according to claim 9, wherein at least part of the unctuous agent (B) is selected from the group consisting of organopolysiloxanes having a viscosity of from 0.65 to 1,000,000 mm<sup>2</sup>/s, cyclic siloxanes, and silicone rubbers or resins dissolved or dispersed in a cyclic siloxane.
- 11. The hair cosmetic according to claim 9 or 10, wherein at least part the aforesaid unctuous agent (B) has a fluorine-containing group.

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- 12. The hair cosmetic according to any one of claims 4 to 11, wherein the hair cosmetic further comprises water (C).
- 13. The hair cosmetic according to any one of claims 4 to 12, wherein the hair cosmetic further comprises a compound (D) having an alcoholic hydroxyl group in a molecule.
- 14. The hair cosmetic according to any one of claims 4 to 13, wherein the hair cosmetic further comprises a water-soluble or water-swelling polymer (E).
  - 15. The hair cosmetic according to any one of claims 4 to 14, wherein the hair cosmetic further comprises a surfactant (F).
- 15 16. The hair cosmetic according to claim 15, wherein the surfactant

  (F) is a linear or branched polyoxyalkylene-modified organopolysiloxane.
- 17. The hair cosmetic according to claim 15, wherein the surfactant
  20 (F) is a linear or branched polyglycerin-modified organopolysiloxane.
- 18. The hair cosmetic according to any one of claims 4 to 17, wherein the hair cosmetic further comprises a crosslinked organopolysiloxane (G).
  - 19. The hair cosmetic according to claim 18, wherein the crosslinked organopolysiloxane (G) has been incorporated in the cosmetic in a state swollen in a silicone having a viscosity of from 0.65 to 10.0 mm<sup>2</sup>/sec in an amount larger than a weight of the crosslinked

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organopolysiloxane (G).

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- 20. The hair cosmetic according to claim 18 or 19, wherein the crosslinked organopolysiloxane (G) is a reaction product of an organopolysiloxane having at least two alkenyl groups in a molecule with an organohydrogenpolysiloxane having an Si-H bond.
- 21. The hair cosmetic according to any one of claims 18 to 20, wherein the crosslinked organopolysiloxane (G) has at least one moiety selected from the group consisting of polyoxyalkylene moieties, polyglycerin moieties, alkyl moieties, alkenyl moieties, aryl moieties and fluoroalkyl moieties.
- 22. The hair cosmetic according to any one of claims 4 to 21, wherein the cosmetic further comprises a silicone resin (H) selected from the group consisting of acryl silicone resins, silicone network compounds represented as MQ, MDQ, MT, MDT, or MDTQ, and silicone network compounds having at least one moiety selected from the group consisting of pyrrolidone moieties, long-chain alkyl moieties, polyoxyalkylene moieties, fluoroalkyl moieties, and amino moieties.
  - 23. The hair cosmetic according to claim 22, wherein the silicone resin (H) is the acryl silicone resin having at least one moiety selected from the group consisting of pyrrolidone moieties, long-chain alkyl moieties, polyoxyalkylene moieties, fluoroalkyl moieties and carboxylic acid moieties or other anionic moieties.
- 24. The hair cosmetic according to any one of claims 4 to 23,30 wherein the cosmetic further comprises one or more of powder and/or

coloring agent (I).

- 25. The hair cosmetic according to claim 24, wherein at least part of the powder and/or coloring agent (I) is crosslinked silicone fine powder with a structure of crosslinked dimethylsilicone, polymethylsilsesquioxane fine powder, silica made hydrophobic, or composite fine powder composed of spherical silicone rubber coated with polymethylsilsesquioxane particles.
- 26. The hair cosmetic according to any one of claims 4 to 25, wherein the cosmetic is in the form of liquid, milky lotion, cream, solid, paste, gel, multilayer, mousse, spray or stick.